AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A memory function body comprising:

a first conductor and a second conductor;

a medium that is formed between the first conductor and the second conductor and made of a first material;

at least one particle that is formed in the medium and made of a third material; and

a cover, formed within the medium and set away from each surface of the medium, that covers the entire surface of the at least one particle and is made of a second material, wherein

the second material being a material ~~that functions~~ capable of functioning as a barrier against passage of electric charges, and

the third material being a material that ~~has a function to retain~~ is capable of retaining electric charges.

2. (Original) The memory function body as claimed in claim 1, wherein the first material and the second material are different insulators, and the third material is a conductor.

3. (Original) The memory function body as claimed in claim 2, wherein the second material is a material obtained by making the third material insulative.

4. (Original) The memory function body as claimed in claim 3, wherein the second material is a material obtained by oxidizing or nitriding the third material.

5. (Original) The memory function body as claimed in claim 1, wherein the first material is a silicon oxide or a silicon nitride, the second material is a semiconductor oxide or a metal oxide, and the third material is a semiconductor or a metal.

6. (Original) The memory function body as claimed in claim 4, wherein the second material is aluminum oxide, and the third material is aluminum.

7. (Original) The memory function body as claimed in claim 5, wherein the second material is aluminum oxide, and the third material is aluminum.

8. (Original) The memory function body as claimed in claim 1, wherein the first conductor is a silicon substrate, and the medium is a silicon oxide or a silicon nitride.

9. (Withdrawn) A particle forming method, comprising:

implanting a substance for forming one or more particles into an insulator by an ion implantation method;

forming conductive particles from the substance implanted in the insulator; and

making the conductive particles insulative at a periphery thereof.

10. (Withdrawn) The particle forming method as claimed in claim 9, wherein the substance for forming conductive particles is implanted into the insulator from a direction that makes an acute angle with respect to a surface of the insulator.

11. (Withdrawn) The particle forming method as claimed in claim 9, comprising ionizing the substance to be implanted into the insulator for forming the conductive particles into negative ions.

12. (Withdrawn) The particle forming method as claimed in claim 9, wherein after implanting the substance for forming one or more conductive particles into the insulator by the ion implantation method, the particle forming method further comprises:

etching the insulator from a top surface to a prescribed depth.

13. (Withdrawn) The particle forming method as claimed in claim 9, wherein said forming conductive particles from the substance implanted in the insulator comprises performing a heat treatment for a time shorter than 24 hours.

14. (Withdrawn) The particle forming method as claimed in claim 9, wherein said making the conductive particles insulative at a periphery thereof comprises oxidizing or nitriding the periphery of each conductive particle.

15. (Withdrawn) A particle forming method, comprising:

diffusing a substance for forming one or more conductive particles into an insulator by a solid phase diffusion method;

forming conductive particles from the substance diffused in the insulator; and

making the conductive particles insulative at a periphery thereof.

16. (Withdrawn) The particle forming method as claimed in claim 15, wherein said making the conductive particles insulative at a periphery thereof comprises oxidizing or nitriding the periphery of each conductive particle.

17. (Withdrawn) The particle forming method as claimed in claim 15, wherein said forming conductive particles from the substance implanted in the insulator comprises performing a heat treatment for a time shorter than 24 hours.

18. (Withdrawn) A particle forming method, comprising:

forming an insulator on a semiconductor substrate;

implanting a substance that contains a conductive element into the insulator by a negative ion implantation method; and

subjecting the insulator, in which said substance has been implanted, to heat treatment in an oxidizing atmosphere or a nitriding atmosphere.

19. (Withdrawn) The particle forming method as claimed in claim 18, wherein said implanting a substance that contains a conductive element into the insulator comprises implanting the substance from a direction that makes an acute angle with respect to a surface of the insulator.

20. (Withdrawn) The particle forming method as claimed in claim 18, wherein the heat treatment in the oxidizing atmosphere or the nitriding atmosphere is performed for a time shorter than 24 hours.

21. (Currently Amended) A memory device including a field-effect type transistor that employs the a memory function body comprising:

a first conductor and a second conductor;

a medium that is formed between the first conductor and the second conductor and made of a first material;

at least one particle that is formed in the medium and made of a third material; and

a cover, formed within the medium and set away from each surface of the medium, that covers the entire surface of the at least one particle and is made of second material, wherein

the second material being a material ~~that functions~~ capable of functioning as a barrier against passage of electric charges, and

the third material being a material that ~~has a function to retain~~ is capable of retaining electric charges.

22. (Currently Amended) A semiconductor device including a memory circuit having memory devices therein, each of which includes a field-effect type transistor that employs a memory function body comprising:

a first conductor and a second conductor;

a medium that is formed between the first conductor and the second conductor and made of a first material;

at least one particle that is formed in the medium and made of a third material; and

a cover, formed within the medium and set away from each surface of the medium, that covers the entire surface of the at least one particle and is made of a second material, wherein

the second material being a material ~~that functions~~ capable of functioning as a barrier against passage of electric charges, and

the third material being a material that ~~has a function to retain~~ is capable of retaining electric charges.

23. (Currently Amended) Electronic equipment including a semiconductor device including a memory circuit having memory devices therein, each of which includes a field-effect type transistor that employs a memory function body comprising:

a first conductor and a second conductor;

a medium that is formed between the first conductor and the second conductor and made of a first material;

at least one particle that is formed in the medium and made of a third material; and

a cover, formed within the medium and set away from each surface of the medium, that covers the entire surface of the at least one particle and is made of a second material, wherein

the second material being a material ~~that functions~~ capable of functioning as a barrier against passage of electric charges, and

the third material being a material that ~~has a function to retain~~ is capable of retaining electric charges.

24. (Previously Presented) The memory function body as claimed in claim 1, wherein the third material comprises at least one element selected from the group consisting of aluminum, tungsten, niobium, zirconium, titanium, chromium, tin, cobalt, nickel, iron, antimony, lead,

silver, gold, copper, nickel, platinum, zinc, hafnium, manganese, tantalum, indium, and germanium.

25. (Previously Presented) The memory function body as claimed in claim 1, wherein the second material is silver oxide and the third material is silver.

26. (Previously Presented) The memory function body as claimed in claim 1, wherein the second material is silicon nitride and the third material is silicon.

27. (Previously Presented) The memory function body as claimed in claim 1, wherein the medium has a thickness of less than 70 nm.

28. (Previously Presented) The memory function body as claimed in claim 1, wherein said particle has a diameter within a range of larger than 0.1 nm and smaller than 4nm.

29. (Previously Presented) The memory function body as claimed in claim 1, wherein the first, second, and third materials are different materials.

30. (Previously Presented) A dynamic random access memory having a capacitor, said capacitor comprising the memory function body as claimed in claim 1.

31. (Previously Presented) The memory function body as claimed in claim 1, wherein an outer surface of the cover is a boundary between the cover and the medium.

32. (Previously Presented) The memory function body as claimed in claim 1, wherein said cover functions as a barrier to prevent electric charges from passing to the medium.

33. (Currently Amended) A memory function body comprising:

a lower conductor and an upper conductor;

a medium that is formed between the lower conductor and the upper conductor and made of a first material;

a plurality of particles that are located in different depths within the medium set away from each of all surfaces of the medium and made of a third material, and

covers, formed within the medium and set away from each surface of the medium, that cover the entire surface of each of the particles and are made of a second material,

the second material being a material ~~that functions~~ capable of functioning as a barrier against passage of electric charges, and

the third material being a material that ~~has a function to retain~~ is capable of retaining electric charges.

34. (Previously Presented) The memory function as claimed in claim 33, wherein the covers for the particles closer to the upper conductor are thicker than the covers for the particles closer to the lower conductor.

35. (New) The memory function body as claimed in claim 1, wherein said cover that covers the entire surface of the at least one particle is completely embedded within the medium.

36. (New) The memory function body as claimed in claim 1, wherein said medium is formed as a single layer.

37. (New) The memory device as claimed in claim 21, wherein said cover that covers the entire surface of the at least one particle is completely embedded within the medium.

38. (New) The memory device as claimed in claim 21, wherein said medium is formed as a single layer.

39. (New) The semiconductor device as claimed in claim 22, wherein said cover that covers the entire surface of the at least one particle is completely embedded within the medium.

40. (New) The semiconductor device as claimed in claim 22, wherein said medium is formed as a single layer.

41. (New) The electronic equipment as claimed in claim 23, wherein said cover that covers the entire surface of the at least one particle is completely embedded within the medium.

42. (New) The electronic equipment as claimed in claim 23, wherein said medium is formed as a single layer.

43. (New) The memory function body as claimed in claim 33, wherein said covers that cover the entire surface of each of the particles is completely embedded within the medium.

44. (New) The memory function body as claimed in claim 33, wherein said medium is formed as a single layer.